

In the Abstract:

Please replace Abstract with the following:

A position sensor device ~~for determining~~ a position of a reciprocating object and includes, ~~comprising (a)~~ at least one magnetically encoded region fixed on a reciprocating object, ~~comprising (b)~~ at least one magnetic field detector, and ~~comprising (c)~~ a position determining unit. The magnetic field detector is adapted to detect a signal generated by the magnetically encoded region when the magnetically encoded region reciprocating with the reciprocating object passes a surrounding area of the magnetically encoded region. The position determining unit is adapted to determine a position of a reciprocating object based on the detected magnetic signal.

(Fig. 77)